

ANTERIOR OF MANAGER CONTRACTOR AND MORNING

TO ALL TO VILONIUESE PRESENTS SHALL COME:

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office

December 16, 2004

THIS IS TO CERTIFY THAT ANNEXED HERETO IS A TRUE COPY FROM THE RECORDS OF THE UNITED STATES PATENT AND TRADEMARK OFFICE OF THOSE PAPERS OF THE BELOW IDENTIFIED PATENT APPLICATION THAT MET THE REQUIREMENTS TO BE GRANTED A FILING DATE.

APPLICATION NUMBER: 60/523,103
FILING DATE: November 19, 2003
RELATED PCT APPLICATION NUMBER: PCT/US04/39032

Certified by



Jon W Dudas

Acting Under Secretary of Commerce for Intellectual Property and Acting Director of the U.S. Patent and Trademark Office U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PROVISIONAL APPLICATION FOR PATENT COVER SHEET
This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53(c)

Express Mail Label No. INVENTOR(S) Given Name (first and middle [if any]) Residence Family Name or Sumame (City and either State or Foreign Country) CHAPEL HILL, NC MICHAEL H. WESTON **HESSION** RICHMOND, VA CHRISTOPHER J. Additional inventors are being named on the separately numbered sheets attached hereto TITLE OF THE INVENTION (500 characters max) A PACKAGE FOR HOLDING AND PROTECTING VIALS Direct all correspondence to: **CORRESPONDENCE ADDRESS** Customer Number 020457 Firm or Antonelli, Terry, Stout, and Kraus, LLP Individual Name 1300 NORTH 17TH STREET **Address** Address **SUITE 1800** State VA Zip City **ARLINGTON** 22209 Fax Country Telephone 703 312-6600 703 312-6666 USA ENCLOSED APPLICATION PARTS (check all that apply) Specification Number of Pages CD(s), Number Z Drawing(s) Number of Sheets Other (specify) Fee Transmittal Form 1 Application Data Sheet. See 37 CFR 1.76 METHOD OF PAYMENT OF FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT Applicant daims small entity status. See 37 CFR 1.27. FILING FEE A check or money order is enclosed to cover the filing fees Amount\$ 160.00 The Commissioner is hereby authorized to charge filing fees or credit any overpayment to Deposit Account Number: 01-2135 Payment by credit card. Form PTO-2038 is attached.

[Page 1 of 2] Date 11/19/2003

REGISTRATION NO. 29,621

(if appropriate)

Docket Number: 1299.43298X00

TYPED or PRINTED NAME Carl L. Brundidge

TELEPHONE 703 312-6600

United States Government.

Respectfully submitted

SIGNATURE 4

USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT

The invention was made by an agency of the United States Government or under a contract with an agency of the

Yes, the name of the U.S. Government agency and the Government contract number are:

This collection of information is required by 37 CFR 1.51. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submiliting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Provisional Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/17 (10-03)
Approved for use through 07/31/2006. OMB 0851-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

FEE TRANSMITTAL									d to respond to a collection of information unless it displays a valid OMB control number.						
▍⋍∊	ſR	NAS	SMIT	ΤΔΙ	Complete if Known										
					Application Number				Not yet assi	Not yet assigned					
U.S	ar	FY	2004		F	ling D	ate		November 1	November 19, 2003					
[`	~ !	• •			F	First Named Inventor			WESTON, N	WESTON, MICHAEL					
Effective 10/01/2003. Patent fees are subject to annual revision.									Examiner Name						
	nall e	entity stati	us. See 37 Cf	FR 1.27	A	Art Unit					•				
Applicant claims small entity status. See 37 CFR 1.27 TOTAL AMOUNT OF PAYMENT (\$) 160								ttome	/ Docke	1 No.	1299.432981	1299.43298L00			
			check all that		, r										
☐ Check		d Mo			╂	FEE CALCULATION (continued)									
_ Cileux	t Car		der	i	3. A	3. ADDITIONAL FEES									
☑ Deposit .															
Deposit								n arna Entity. Small Entity							
Numb							Large Entity Small Entity							Fee Paid	
Deposit			7 7 044 8 1/ 11 0				Fee Code	Fee.	Fee	Fee (\$)	Foo Docarintin-			10010	
	Account Antonelli, Terry, Stout & Kraus, LLP							(\$) 130		(\$) 65 Sur		Fee Description rcharge – late filing fee or oath			
The Directo Charge f			that apply) redit any overpa	ayments	1052	50	2052	25	Surcharge - late process sheet	rcharge – late provisional filing fee or ver sheet					
Charge any additional fee(s) during the pendency of this application.								130	1053		Non-English specifi	cation			
Established any additional rector during the pendency of this application.								2,520	1812	2,520	For filing a request	for <i>ex parte</i> reexa	mination		
☐ Charge fee(s) indicated below, except for the filing fee to the above-Identified deposit account.								920*	1804	920°	Requesting publicat Examination action	questing publication of SIR prior to armination action			
FEE CALCULATION 1. BASIC FILING FEE								1,840	1805	1,840	Requesting publicate Examiner action	questing publication of SIR after sminer action			
Large Entity Small Entity								110	2251	55	Extension for reply	ension for reply within first month			
Fee Code	Fee (\$)	Fee Code	Fee (t)	Fee Desc	ription	Fee Paid	1252	420	2252	210	Extension for reply	within second mo	nth		
1001	770	2001		Utility filing	fee		1253	950	2253	475	Extension for reply	within third month		<u> </u>	
1002	340	2002	170-	Design filir	ng fee		1254	1,480	2254	740	Extension for reply	within fourth mont	h		
1003	530	2003	265	Plant filing	fee		1255	2,010	2255		Extension for reply	within fifth month			
1004	770	2004	385	Reissue fil	•		1401	330 330	2401		Notice of Appeal				
1005	160	2005	80	Provisiona	l filing fee	160	1402 1403	290	2402 2403	165 145	Filing a brief in supp Request for oral her				
				SUBTO	TAL (1)		1451	1,510	1451		Petition to institute	-	adina		
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE								110	2452	55		ition to revive - unavoidable			
Fee from								1,330	2453	665		ition to revive – unintentional			
			tra Cla	aims bel	low Fe	e Paid	1501	1,330	2501	685	Utility Issue fee (or	reissue)		-	
Total Claims	3	-20*		x	=		1502	480	2502	240	Design issue fee				
Indep. Claims		-3••	=	×	*		1503	640	2503	320	Plant issue fee				
Multiple Dependent =							1406	130	1460	130		ons to the Commissioner			
Large Entity Small Entity							1807	50	1807	50	-	ssing fee under 37 CFR 1.17(q) ssion of Information Disclosure Stmt			
Fee Fee Code (\$)	Fee		5	<u>Fe</u>	e Description		1806 8021	180 40	1806 8021	180 40					
1202 18 1201 88	220	2 9	Claims in excess of 20			on of 3	1809	770	2809	385	property (times num	ording each patent assignment per erty (times number of properties)			
1203 290	220		Independent claims in exces Multiple dependent claim, if a			f not paid		′′′∪			(37 ČFR § 1.129(a)	g a submission after final rejection CFR § 1.128(a))			
1204 88	220	4 43	Reissue independent claims over original patent			1810	770	2810		examined (37 CFR	ach additional Invention to be lined (37 CFR § 1.129(b))				
1205 18	220	5 9		** Reissue	claims in excess		1801	770	2801		Request for Continu		RCE)		
and over original patent SUBTOTAL (2) \$							1802	302 900 1802 900 Request for expedited examination of a design application							
or number previously paid, if greater, For Reissues, see above.								i fee (spe	cify)		_				
G nanwer	, u gn	edier, FOF N	uussuus, 500 8De	ove.				n For	- Daid	SURTOTAL "	3) (\$)				
							r.eut	Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$)							
SUBMITTE	BY										Complete (if app	licable)			
						stration No. mey/Agent) 29,621			24	Telephone	703-312-6	200			
						-uuriib)	tomey/Agent) 2				Telephone 703-3		000		
Signature												Date	11/19/2003		

WARKING: Information on this form may become public. Credit card information on the Included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

A PACKAGE FOR HOLDING AND PROTECTING VIALS

BACKGROUND OF THE INVENTION

5

10

15

20

25

The present invention relates generally to packaging for holding and protecting vials. More particularly the present invention relates to packaging for holding and protecting vials in a horizontal manner to permit the labeling on the vials to be easily viewed to reduce product errors.

Conventional vial packaging incorporates elements of foam or plastic to protect the product in distribution. Such conventional foam or plastic packaging normally holds the vials in a vertical fashion, enveloping the entire product but the cap. Since labeling including product and patient information is affixed to the sides of the vials, Conventional vial packaging does not allow for such labeling to be easily viewed. Thus, conventional vial packaging can induce, for example, medication errors including taking and administering the wrong medication. As is well known medication errors is a significant problem for healthcare institutions (hospitals, etc.) and healthcare providers.

Therefore, packaging is needed that can help to reduces these types of errors.

SUMMARY OF THE INVENTION

The present invention provides packaging for holding and protecting vials in a horizontal manner to permit the labeling on the vials to be easily viewed to reduce product errors.

Particularly the present invention provides packaging for holding and protecting vials in a horizontal manner including an inner paperboard card which holds the vials in a horizontal manner and an outer package to which the inner paperboard card is releasable attached for enclosing the inner

paperboard card including the vial in a protective cover. The inner paperboard card holds the vials in a horizontal manner by affixing the cap of each vial to a simple click-in paperboard insert formed in a spine of the inner paperboard card. The inner paperboard card by holding the vials in a horizontal manner permits the labeling on the vials to be easily viewed to reduce product errors.

The inner paperboard card and the outer package are each formed from a one piece paperboard which has been cut to have a particular configuration and scored to have fold lines at various preset locations on the paperboard. Each of the inner paperboard card and the outer package is folded along the fold lines according to a preset sequence so as to form the respective element.

BRIEF DESCRIPTION OF THE DRAWINGS

5

10

15

20

The foregoing and a better understanding of the present invention will become apparent from the following detailed description of example embodiments and the claims when read in connection with the accompanying drawings, all forming a part of the disclosure of this invention. While the foregoing and following written and illustrated disclosure focuses on disclosing example embodiments of the invention, it should be clearly understood that the same is by way of illustration and example only and the invention is not limited thereto, wherein in the following brief description of the drawings:

Figs. 1A and 1B are diagrams illustrating the inner paperboard card and the outer package and how they cooperate with one another according to the present invention; and

Figs. 2A and 2B are diagrams showing the configuration of the one piece paperboards from which the inner paperboard card and the outer package are formed.

DETAILED DESCRIPTION OF THE INVENTION

5

10

15

20

25

Figs. 1A and 1B are diagrams illustrating an inner paperboard card 10 and an outer package 20 and how they cooperate with one another according to the present invention.

The present invention as illustrated in Figs. 1A and 1B provides packaging for holding and protecting vials in a horizontal manner including the inner paperboard card 10 which holds the vials in a horizontal manner and the outer package 20 to which the inner paperboard card 10 is releasable attached for enclosing the inner paperboard card 10 including the vials in a protective cover.

The inner paperboard card 10 holds the vials in a horizontal manner by affixing the cap of each vial to a simple click-in paperboard insert 1010 formed in a spine 1020 of the inner paperboard card 10. The inner paperboard card 10 by holding the vials in a horizontal manner permits the labeling on the vials to be easily viewed to reduce product errors. The outer package 20 is formed, for example, as an open end box in which the inner paperboard card 10 is inserted. The inner paperboard card 10 is releasable attached to the outer package 20. The outer package 20 provides protection to the vials during shipping and handling.

The inner paperboard card 10 and the outer package 20 are each formed from a one piece paperboard 30 and 40 respectively. Each one piece paperboard 30, 40 has been cut to have a particular configuration and scored

to have fold lines 3010, 4010 at various preset locations on the one piece paperboard. Each of the inner paperboard card 10 and the outer package 20 is folded along the fold lines 3010, 4010 according to a preset sequence so as to form the respective element.

5

10

15

20

25

The package as described according to the present invention provides ease-of-use benefits to the consumer and caregiver, while also offering product protection, cost-effectiveness and labeling to the manufacturer. The present invention, a secondary package, allows for vial-packaged products (including, but not limited to, pharmaceuticals) to be held in place in a highly durable, user-friendly all-paperboard package. Unlike most vial packaging systems, with the invention, vials are held in place in a horizontal manner by affixing the cap of the vial to a simple click-in paperboard insert. With the horizontal positioning, the labeling of each vial can be easily viewed, including barcodes and NDC numbers. The ability to easily check labeling before use (including, but not limited to, drug administration) helps to reduce product use errors. Medication errors, such as taking the administering the wrong medication, are a significant problem for healthcare institutions (hospitals, etc.) and healthcare providers.

The package of the present invention also provides patient medication compliance benefits, as the outer package (a folding carton) is affixed to the inner paperboard card that holds the vials. Patient and healthcare provider education, such as dosing reminders and potential side effect information, are easily visible to the patient or user throughout the drug regimen.

As per the present invention drugs that are manufactured in a vial application can be secured to an inner pullout card for convenient access and

product identification by the patient and user. Patient and healthcare information or history can be recorded directly on the package concerning the individual's dose and delivery. This information remains visible throughout the regimen. The two flaps located inside the inner drawer add support to the spine and protection to the vials.

Current vial packaging incorporates elements of foam or plastic to protect the product in distribution. Foam or plastic packaging normally holds vial in a vertical fashion, enveloping all of the product but the cap. The present invention takes a different approach, holding the vials in place in a horizontal manner by securing the cap to the inner card. The present invention has environmental advantages over existing packaging types because it is all paperboard and fully recyclable. Unlike current packaging for vials, information can be printed in advance or written next to each and every vial, so that patients and users are prompted with key dosing information (i.e. "Saturday dose" or "Take with food").

While the invention has been described in terms of its preferred embodiments, it should be understood that numerous modifications may be made thereto without departing from the spirit and scope of the present invention. It is intended that all such modifications fall within the scope of the appended claims.

WHAT IS CLAIMED IS:

 A package for holding and protecting vials in a horizontal manner comprising:

an inner paperboard card which holds the vials in a horizontal manner;

5 and

an outer package to which the inner paperboard card is releasable attached for enclosing the inner paperboard card including the vial in a protective cover,

wherein said inner paperboard card holds the vials in a horizontal

manner by affixing the cap of each vial to a simple click-in paperboard insert formed in a spine of the inner paperboard card.

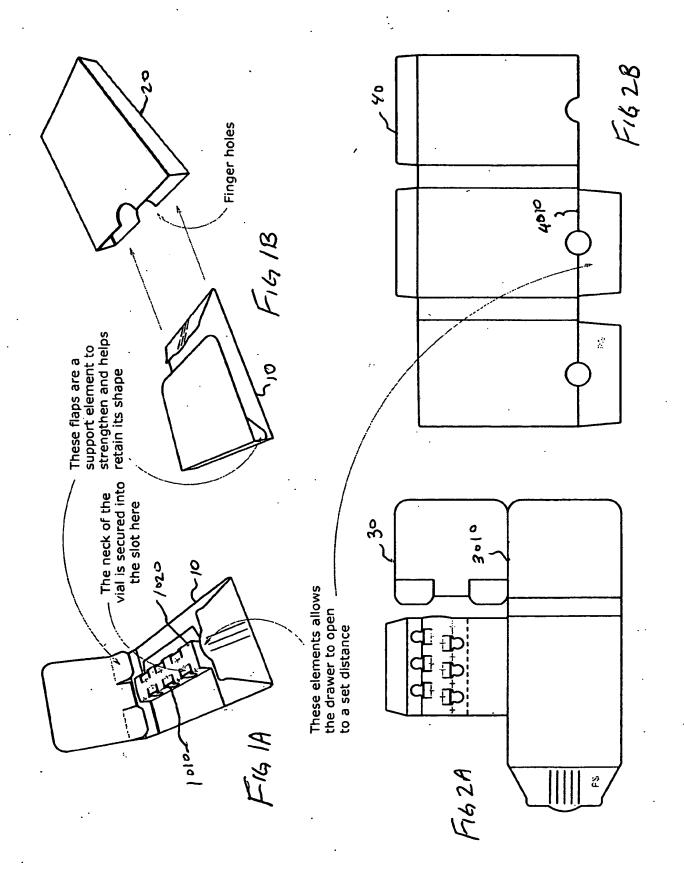
- 2. A package according to claim 1, wherein said inner paperboard card and said outer package are each formed from a one piece paperboard which has been cut to have a particular configuration and scored to have fold lines at various preset locations on the one piece paperboard.
- 3. A package according to claim 1, wherein each of said inner paperboard card and said outer package is folded along the fold lines according to a preset sequence so as to form the respective element.

15

20

ABSTRACT

A package for holding and protecting vials in a horizontal manner including an inner paperboard card which holds the vials in a horizontal manner and an outer package to which the inner paperboard card is releasable attached for enclosing the inner paperboard card including the vial in a protective cover. The inner paperboard card holds the by affixing the cap of each vial to a simple click-in paperboard insert formed in a spine of the inner paperboard card. The inner paperboard card and the outer package are each formed from a one piece paperboard which has been cut to have a particular configuration and scored to have fold lines at various preset locations on the paperboard. Each of the inner paperboard card and the outer package is folded along the fold lines according to a preset sequence so as to form the respective element.



Document made available under the Patent Cooperation Treaty (PCT)

International application number: PCT/US04/039032

International filing date: 19 November 2004 (19.11.2004)

Document type: Certified copy of priority document

Document details: Country/Office: US

Number: 60/523,103

Filing date: 19 November 2003 (19.11.2003)

Date of receipt at the International Bureau: 23 December 2004 (23.12.2004)

Remark: Priority document submitted or transmitted to the International Bureau in

compliance with Rule 17.1(a) or (b)

